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# 1 CONTENT PROVISION, DISTRIBUTION, REGISTRATION, MANAGEMENT,

#### 2 AND REPRODUCTION

#### FIELD OF THE INVENTION

- 4 The present invention relates to additional information
- 5 distribution. More particularly it relates to
- 6 distributing additional information using the free
- 7 distribution of digital content.

#### 8 BACKGROUND

- 9 Digital content is a commodity that can be freely
- 10 exchanged by anyone via a network, such as the Internet,
- 11 because of the ease with which it can be stored, copied
- 12 and transmitted. Relatively recently, as Internet use
- 13 continues to grow, there has been a great increase in the
- 14 speed at which data travels over communication lines,
- 15 until today, not only music data but also much larger data
- 16 packages, such as those for video data, can be rapidly
- 17 exchanged. Meanwhile, in Japan a reappraisal of
- 18 communication fees and access fees is producing dramatic
- 19 results, while an infrastructure permitting uninterrupted
- 20 connections is gradually being established. As everyone
- 21 knows, in this environment the practice of accessing and
- 22 downloading free popular content available via the
- 23 Internet has expanded explosively, and momentarily will be
- 24 common throughout the world.

- 1 There are well known examples of systems established for
- 2 the distribution of free content. These systems are based
- 3 on P2P file programs that facilitate the exchange and use
- 4 in common of files via the Internet, without requiring the
- 5 intervention of a central server. With these systems,
- 6 music available at the sites of users registered with a
- 7 network can be downloaded for free from anywhere in the
- 8 world.
- 9 However, these systems do not incorporate mechanisms for
- 10 managing copyrights or right of use of registered content,
- 11 data recorded on CDs, for example, the copying of which is
- 12 inhibited may be uploaded. And in actuality, most users
- 13 acquiring content in this manner maybe guilty of copyright
- 14 infringement, regardless of whether they are aware of it
- 15 or not.
- 16 In a further attempt to resolve the problem presented by
- 17 the provision of free content, a move has been made to
- 18 provide a technique whereby compensation would be paid
- 19 musicians whose music is distributed for free. In one
- 20 example, a technique allows a content owner to enter a
- 21 voice advertisement in an MP3 file, for which a
- 22 standardized compression system called MPEG-1 Audio
- 23 Layer-III is used. This technique is intended for use in
- 24 the preparation of music files for which benefits are
- 25 forthcoming even when the music is distributed for free,
- and the development of a system whereby royalty payments
- 27 would be made to musicians, publishing companies and

- 1 record companies.
- 2 The intent of this technique is the inclusion in content
- 3 of advertisements that would consistently garner
- 4 sponsorship fees that could be shared among composers,
- 5 etc. However, were this idea adopted, an advertisement
- 6 could be inserted into content only one time, and since
- 7 the advertisement could not be rewritten, it would be
- 8 monotonously reproduced, no matter how many years had
- 9 elapsed. In addition, it would be difficult to track
- 10 usage frequencies, and advertisers would have to pay usage
- 11 fees regardless of how effective their advertisements
- 12 were. In this case, the assessment of high advertisement
- 13 fees would not justified, and thus, the return afforded
- 14 the persons who provided the content would be uncertain.
- 15 Further, since a fixed, specific format would be used, the
- 16 content could not be reproduced by portable players
- 17 commonly available on the market.

#### 18 SUMMARY OF THE INVENTION

- 19 To resolve the above technical problems, it is one aspect
- 20 of the present invention to provide a system for using,
- 21 for aggressive business advertising purposes, the
- 22 properties of media that powerfully convey content.
- 23 It is another aspect of the present invention to resolve
- 24 the problems presented by the illegal use of downloading
- 25 services for providing free content and to devise a legal

- 1 system.
- 2 It is an additional aspect of the present invention to
- 3 flexibly set up added information, such as advertisements
- 4 introduced by the same content, and an effective time for
- 5 the presentation of the additional information.
- 6 It is a further aspect of the present invention to provide
- 7 a system that ensures the equitable sharing with content
- 8 providers of rewards consonant with how helpful content is
- 9 when used as an advertisement and/or other content medium.
- 10 To achieve the above aspects, according to the present
- 11 invention, an advertising or other content distribution
- 12 system employs a so-called P2P system for the distribution
- of free content, and provides a service for the
- 14 distribution of advertisement and/or other content to
- users who desire to acquire the free content. That is,
- 16 according to a first example embodiment of the invention,
- 17 an advertisement and/or other content distribution system
- 18 comprises: a content provider system, for providing for a
- 19 user terminal content to which an identifier has been
- 20 added; a user terminal, for receiving the content, via a
- 21 network, from the content provider system, and for
- 22 identifying and outputting, to the network, the identifier
- 23 added to the content; and an advertisement and/or other
- 24 content provider system, for the distribution to the user
- 25 terminal, based on the identifier output by the user
- 26 terminal, of a predetermined advertisement and/or other
- 27 content via the network.

- 1 In some cases, the advertisement and/or other content
- distribution system further comprises: an agent server
- 3 system, for managing the identifier added to the content,
- 4 wherein the agent server system employs the identifier,
- 5 output by the user terminal, to transmit an advertisement
- 6 and/or other content distribution trigger to the
- 7 advertisement and/or other content provider system for the
- 8 distribution of the predetermined advertisement and/or
- 9 other content. This configuration is preferable in that
- 10 an advertisement and/or other content can be introduced
- 11 systemwide using the same content, and an effective
- 12 propagation period for the advertisement and/or other
- 13 content can be flexibly set.
- 14 According to another aspect of the invention, a content
- 15 registration/management system comprises: content
- 16 registration request reception means, for receiving a
- 17 request for content registration from a content provider
- 18 that provides content; identifier provision means, for
- 19 setting an identifier, based on the request that is
- 20 received, to be added to the content that is to be
- 21 provided a user terminal, and for providing the identifier
- 22 to a content provider; and a content ledger database, for
- 23 storing information related to the identifier provided the
- 24 content provider.
- 25 In an example embodiment, a particular content
- 26 registration/management system comprises: identifier
- 27 reception means, for receiving from a user terminal an

- 1 identifier provided for the user terminal; and content
- 2 reproduction information collection means, for collecting,
- 3 based on the reception of the identifier, information
- 4 related to the reproduction of content, such as a count
- 5 used for calculating the frequency whereat the identifier
- 6 is received. With this configuration, it is preferable
- 7 that a count be used to represent the contribution level
- 8 of the content as an advertisement and/or other content
- 9 medium.
- 10 Further, the content registration/management system often
- 11 comprises: an advertisement and/or other content ledger
- 12 database for registering a list of contents that can be-
- 13 used as advertisement and/or other content media; and
- 14 notification means for searching the advertisement and/or
- other content ledger database based on the received
- 16 identifier, and for transmitting an advertisement and/or
- 17 other content distribution request to an advertiser.
- 18 According to an additional aspect of the invention, an
- 19 advertisement and/or other content distribution management
- 20 system is provided for managing the distribution of an
- 21 advertisement and/or other content to a user terminal. In
- 22 an example embodiment the system comprises: an
- 23 advertisement and/or other content ledger database, for
- 24 the storage therein of a list to which content used as an
- 25 advertisement and/or other content medium for the
- 26 advertisement and/or other content and information
- 27 concerning an advertisement and/or other content
- 28 distribution site for disseminating the advertisement

- and/or other content when the content is reproduced;
- 2 reception means, for receiving a content ID output by the
- 3 user terminal when the content is reproduced; search
- 4 means, for performing a search, based on the content ID,
- of the advertisement and/or other content ledger database
- 6 for the predetermined advertisement and/or other content
- 7 distribution site; and notification means, for issuing to
- 8 the predetermined advertisement and/or other content
- 9 distribution site, when found, an advertisement and/or
- 10 other content distribution request.
- 11 The reception means receives address information for the
- 12 user terminal, and the notification means transmits the
- 13 address information to the advertisement and/or other
- 14 content distribution site. As a result, the advertisement
- 15 and/or other content distribution destination is
- 16 manifested, and can contribute to an increase in the
- 17 effect produced by advertising through the distribution,
- 18 for example, of an advertisement and/or other content that
- is appropriate for the specific user.
- 20 According to a further aspect of the invention, a content
- 21 provider system comprises: storage means, for storing
- 22 pertinent content and a corresponding content ID for
- 23 identifying the pertinent content; reception means, for
- 24 receiving a content download request from a user terminal;
- and content provision means, for reading, based on the
- 26 content downloading request, the pertinent content and the
- 27 corresponding content ID from the storage means, and for
- 28 providing for the user terminal the pertinent content and

- 1 the content ID.
- 2 The storage means is used to store a content with a
- 3 content ID being embedded. Further, before the content is
- 4 provided for the user terminal, the content ID may be
- 5 added to the content. That is, in the storage means the
- 6 content and the content ID may be separately stored, or
- 7 the content may be stored with the content ID being
- 8 embedded.
- 9 In a further example embodiment, the content provider
- 10 system further comprises: registration request output
- 11 means, for outputting a registration request to an agent
- 12 server that manages a content ID; and content ID reception
- 13 means, for receiving, based on the registration request,
- 14 the content ID from the agent server. The agent server
- 15 can also receive a content ID embedding tool, or a service
- 16 for embedding a content ID.
- 17 According to a still further aspect and example embodiment
- 18 of the invention, a user terminal comprises: content
- 19 reproduction means, for reproducing content wherein a
- 20 content ID has been embedded; detection means, for
- 21 detecting the embedded content ID when the content is to
- 22 be reproduced; notification means, for transmitting the
- 23 detected content ID to a predetermined server via a
- 24 network; and advertisement and/or other content data
- 25 reception means for receiving from a predetermined
- 26 advertisement and/or other content distribution site, via
- 27 a network, advertisement and/or other content data

- 1 corresponding to the content ID. During the reproduction
- 2 of the content, the content reproduction means can output
- 3 received advertisement and/or other content data having a
- 4 pop-up form, for example.
- 5 According to one more aspect of the invention, an
- 6 advertisement and/or other content distributer system
- 7 comprises: registration request output means, for
- 8 outputting an advertisement and/or other content
- 9 registration request to an agent server system that
- 10 manages an identifier included in predetermined content;
- 11 address information reception means, for receiving address
- 12 information for a user terminal that reproduces content;
- 13 and advertisement and/or other content data distribution
- 14 means, for distributing advertisement and/or other content
- 15 data that is output to the user terminal for content
- 16 reproduction.
- 17 Further, the advertisement and/or other content
- 18 distributer system also comprises: bill reception means,
- 19 for receiving from the agent server system a bill
- 20 corresponding to the frequency whereat content is
- 21 reproduced; and advertisement and/or other content fee
- 22 payment means, for paying an advertisement and/or other
- 23 content fee in accordance with the bill. This
- 24 configuration is generally preferable because specific
- charging can be performed for an advertisement and/or
- other content distributer in accordance with an obtained
- 27 profit. In addition, with this arrangement, compensation
- 28 corresponding to the contribution made by content can be

- 1 distributed to the content provider.
- 2 The present invention can be implemented as a content
- 3 reproduction program that permits a computer to reproduce
- 4 content in which a content ID is embedded, or as a storage
- 5 medium on which a computer stores a computer-readable
- 6 program. The content reproduction program permits a
- 7 computer to perform: a function (process) for detecting a
- 8 content ID embedded in content; a function (process) for
- 9 transmitting the content ID via a network; and a function
- 10 (process) for, before content reproduction, outputting
- 11 advertisement and/or other content data, based on the
- 12 content ID, that are received via a network and have a
- 13 predetermined form for displaying an advertisement and/or
- 14 other content, for example, while interacting with
- 15 content. The storage medium can be a CD-ROM, a DVD,
- 16 memory, or a hard disk on which a computer stores a
- 17 computer-readable program.

## 18 BRIEF DESCRIPTION OF THE DRAWINGS:

- 19 Fig. 1 is a schematic diagram for explaining an
- 20 advertisement and/or other content distribution system
- 21 according to one embodiment of the present invention.
- 22 Fig. 2 is a block diagram showing the configuration of an
- 23 agent server system 10.
- 24 Figs. 3A and 3B are diagrams showing example data stored
- 25 in a content ledger DB 11 and an advertisement and/or

- 1 other content ledger DB 12.
- 2 Fig. 4 is a block diagram showing the configuration of a
- 3 content provider system 30.
- 4 Fig. 5 is a block diagram showing the configuration of a
- 5 user terminal 50.
- 6 Fig. 6 is a flowchart showing the processing performed by
- 7 a reproduction device (reproduction software) 55 having a
- 8 content ID detection function.
- 9 Fig. 7 is a block diagram showing the configuration of an
- 10 advertiser system 70.

### 11 <u>DESCRIPTION OF THE SYMBOLS</u>

- 12 10: Agent server system
- 13 11: Content ledger DB
- 12: advertisement and/or other content ledger DB
- 13: Content registration/ledger preparation unit
- 16 14: Content ledger search unit
- 17 15: advertisement and/or other content
- 18 registration/ledger preparation unit
- 19 16: advertisement and/or other content ledger search
- 20 unit
- 21 17: advertisement and/or other content distribution
- 22 requesting unit
- 23 18: Content reproduction count aggregating unit
- 24 19: advertisement and/or other content income
- 25 distribution unit
- 26 21: Content registration request reception unit
- 27 22: Content ID transmission unit
- 28 23: advertisement and/or other content registration

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request reception unit
1
          24: Registration notification unit
2
          25: Search request reception unit
3
          26: Search result transmission unit
4
          27: Content ID reception unit
5
          30: Content provider system
6
          31: Content DB
7
          32: Content registration requesting unit
8
          33: Content ID reception unit
9
          34: Content ID embedding unit
10
          35: Downloading request receiving unit
11
          36: ID-added content disclosing unit
12
          50: User terminal
13
          51: Content search requesting unit
14
          52: Search results reception unit
15
          53: Content download requesting unit
16
          54: Content reception unit
17
          55: Reproduction device (reproduction software)
18
          having a content ID detection function
19
          56: ID detection compatible player downloading unit
20
          57: Content ID notification unit
21
          58: User ID notification unit
22
          59: Advertisement and/or other content data reception
23
24
          unit
          70: Advertiser system (advertisement and/or other
25
          content distributer (provider) system)
26
          71: Advertisement and/or other content DB
27
          72: advertisement and/or other content preparation
28
29
          unit
          73: Registration requesting unit
30
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- 1 74: Registration notification reception unit
- 2 75: Addressee user ID notification reception unit
- 3 76: advertisement and/or other content data
- 4 distribution unit.

#### 5 DESCRIPTION OF THE INVENTION

- 6 The present invention provides, methods, systems and
- 7 apparatus for using, for aggressive business advertising
- 8 purposes, the properties of media that powerfully convey
- 9 content. The invention also allows one to resolve the
- 10 problems presented by the illegal use of downloading
- 11 services for providing free content and to devise a legal
- 12 system. It also provides one to flexibly set up added
- 13 information, such as advertisements introduced by the same
- 14 content, and an effective time for the presentation of the
- 15 additional information. It further provides systems that
- 16 enable equitable sharing with content providers of rewards
- 17 consonant with how helpful content is when used as an
- 18 advertisement and/or other content medium.
- 19 An example embodiment of the present invention will now be
- 20 described in detail while referring to the accompanying
- 21 drawings. Fig. 1 is a schematic diagram for explaining
- 22 the configuration of an advertisement and/or other content
- 23 distribution system according to the embodiment. In this
- 24 embodiment, the system comprises: an agent server system
- 25 10, which contributes greatly to the tie-up of content and
- 26 an advertisement and/or other content; a content provider

- 1 system 30, for providing digital content; a user terminal
- 2 50, for downloading and reproducing digital content that
- 3 is provided and displaying the content and an
- 4 advertisement and/or other content; and an advertiser
- 5 system (advertisement and/or other content distributer
- 6 (provider) system) 70 for distributing an advertisement
- 7 and/or other content to the user terminal 50, all of which
- 8 are connected via a network, such as the Internet. In
- 9 this embodiment, with this configuration, the registration
- 10 of content, such as music or video, the downloading of
- 11 content to the user terminal 50, the use of content and
- 12 the reproduction of an advertisement and/or other content,
- 13 and the creation and the preparation of a charge for an
- 14 advertisement and/or other content are performed. The
- 15 above described components (or the systems) can be
- 16 constituted by a single computer, or by multiple
- 17 computers. The content provider system 30, the agent
- 18 server system 10 and the advertiser system 70 may be
- 19 constituted by individual entities, or two or all of them
- 20 may be combined and be constituted by the same entity.
- 21 The agent server system 10 is related to the addition of a
- 22 registration number (content ID), an identifier, to
- 23 digital content provided by the content provider system
- 24 30. Further, the agent server system 10 transmits a
- 25 registration notification in response to a registration
- 26 request issued by the advertiser system 70, and provides
- 27 for the advertiser system 70 information concerning a user
- 28 who is an addressee. To implement these functions, the
- 29 agent server system 10 includes a content ledger DB

- 1 (database) 11, for storing a content management ledger,
- 2 and an advertisement and/or other content ledger DB 12,
- 3 for storing an advertisement and/or other content
- 4 management ledger.
- 5 The content provider system 30 includes a content DB 31,
- 6 for storing digital content to be provided for the user
- 7 terminal 50. A content ID is embedded in the digital
- 8 content that is to be stored in the content DB 31. It
- 9 should be noted, however, that the content and the content
- 10 ID may be stored separately in the content DB 31, and
- 11 before transmission of the content to the user terminal
- 12 50, the content ID may be embedded in the content.
- 13 The advertiser system 70 has an advertisement and/or other
- 14 content DB 71 for storing advertisement and/or other
- 15 content information to be distributed to the user terminal
- 16 50. The "advertiser" may be replaced by the
- 17 "advertisement provider" or the "advertisement
- 18 distributer". The advertiser system 70 can be constituted
- 19 as an additional information provision site for providing
- 20 additional information for the content in addition to the
- 21 common advertisement and/or other content. The additional
- 22 information to be provided can include information used to
- 23 increase the resolution or to improve the tone quality of
- 24 content that is first provided by the content provider
- 25 system 30.
- 26 To easily understand the advertisement and/or other
- 27 content distribution system of this embodiment, the
- 28 processing performed by the individual components of this

- 1 system will be briefly explained while referring to Fig.
- 2 1. First, the agent server system 10 provides a content
- 3 ID embedding tool or an embedding agent service for the
- 4 content provider system 30 (arrow  $\mathbb O$ ). While the content
- 5 provider system 30 issues a digital content registration
- 6 request to the agent server system 10 (arrow @). The
- 7 agent server system 10 also provides an advertisement
- 8 and/or other content preparation tool or a preparation
- 9 agent service for the advertiser system 70 (arrow 3).
- 10 While the advertiser system 70 issues, to the agent server
- 11 system 10, an advertisement and/or other content request
- 12 and a request for the registration of a site that
- 13 distributes an advertisement and/or other content (arrow
- 14 ④).
- 15 Thereafter, the user terminal 50 issues an inquiry to the
- 16 agent server system 10 and searches for preferred content
- 17 (arrow ⑤), and then downloads the preferred content from
- 18 the content provider system 30 (arrow ©). When the
- 19 content is reproduced by the user terminal 50, the user
- 20 terminal 50 transmits a content ID to the agent server
- 21 system 10, which in turn transmits the content ID to the
- 22 advertiser system 70 (arrow 0). Based on the received
- 23 content ID, the advertiser system 70 distributes the
- 24 advertisement and/or other content information stored in
- 25 the advertisement and/or other content DB 71 to the user
- 26 terminal 50 (arrow 8).
- 27 The configurations of the individual systems will now be

- described in detail. Fig. 2 is a block diagram
- 2 illustrating the configuration of the agent server system
- 3 10. The agent server system 10 includes: a content
- 4 registration request reception unit 21, for receiving a
- 5 registration request from the content provider system 30,
- 6 the owner of digital content; a content
- 7 registration/ledger preparation unit 13, for registering
- 8 content and for preparing a content ledger; and a content
- 9 ID transmission unit 22, for transmitting the registration
- 10 numbers (content IDs) of registered content to the content
- 11 provider system 30. The information generated by the
- 12 content registration/ledger preparation unit 13 is stored
- in the content ledger DB 11. The agent server system 10
- 14 further includes: a search request reception unit 25, for
- 15 receiving a search request from the user terminal 50; a
- 16 content ledger search unit 14, for searching for content
- 17 preferred by a user based on the information stored in the
- 18 content ledger DB 11, in accordance with the received
- 19 request; and a search result transmission unit 26, for
- 20 transmitting the search results to the user terminal 50.
- 21 The agent server system 10 also includes: an advertisement
- 22 and/or other content registration request reception unit
- 23 23, for receiving a registration request from the
- 24 advertiser system 70; an advertisement and/or other
- 25 content registration/ledger preparation unit 15, for
- 26 registering a site that distributes advertisements and/or
- other contents; and a registration notification unit 24,
- 28 for transmitting to the advertiser system 70 the
- 29 registered information, which is stored in the

- 1 advertisement and/or other content ledger DB 12 by the
- 2 advertisement and/or other content registration/ledger
- 3 preparation unit 15. The agent server system 10 further
- 4 includes: a content ID reception unit 27 for receiving the
- 5 content ID from the user terminal 50, an advertisement
- 6 and/or other content ledger search unit 16, for searching
- 7 the advertisement and/or other content ledger DB 12 by
- 8 referring to the received content ID; and an advertisement
- 9 and/or other content distribution requesting unit 17 for
- 10 transmitting to the advertiser system 70 a user ID for the
- 11 distribution addressee. Further, the system 10 includes:
- 12 a content reproduction count aggregating unit 18, for
- 13 counting the number of advertisement and/or other content
- 14 request triggers issued based on the content ID obtained
- 15 by the content ID reception unit 27, and for transmitting
- 16 the aggregate to the advertiser system 70 as a
- 17 reproduction count. Further, an advertisement and/or
- 18 other content income distribution unit 19 distributes
- 19 advertisement and/or other content fees to the content
- 20 provider system 30 based on the results obtained by the
- 21 content reproduction count aggregating unit 18.
- 22 Figs. 3A and 3B are diagrams showing example data stored
- 23 in the content ledger DB 11 and the advertisement and/or
- 24 other content ledger DB 12. As is shown in Fig. 3A,
- 25 content IDs, musicians' names, content names, content
- 26 types, site information and line information are stored in
- 27 the content ledger DB 11. In other words, the name of a
- 28 content that can be downloaded and the link to the site
- 29 whereat the content is available are prepared. As is

- 1 shown in Fig. 3B, content IDs, advertiser information,
- 2 advertisement and/or other content conditions and
- 3 advertisement and/or other content periods are stored in
- 4 the advertisement and/or other content ledger DB 12. In
- 5 other words, a list of the contents that can be used as
- 6 advertisement and/or other content media, and the sites of
- 7 advertisers that transmit (re-direct) triggers in response
- 8 to this are shown. The charge types in this embodiment
- 9 are a rate charging system that is effective for a
- 10 specific period of time, and a specific charging system
- 11 that charges a fee in accordance with the number of
- 12 triggers issued in response to advertisement and/or other
- 13 content requests. For the specific charging system, a
- 14 satisfactory amount of money consonant with received
- 15 profit is paid, and a charge is determined in accordance
- 16 with the results obtained by the content reproduction
- 17 count aggregating unit 18. However, it is preferable that
- 18 an upper limit be set to prevent payments from soaring.
- 19 For example, as is shown in Fig. 3B, a predetermined
- 20 condition, such as "up to 2000 times" or "up to 5000 times
- 21 for users under 30", when user information is available,
- 22 can be employed to set a limit. While for the rate
- 23 charging system, a contract can be entered into that
- 24 provides for trigger information for specified content to
- 25 be transmitted to the advertiser system 70 for a specific
- 26 period of time.
- 27 Fig. 4 is a block diagram showing the configuration of the
- 28 content provider system 30. This system 30 includes, to
- 29 fulfill content registration functions, a content

- 1 registration requesting unit 32, for issuing a
- 2 registration request to the agent server system 10; and a
- 3 content ID reception unit 33, for receiving an added
- 4 registration number from the agent server system 10. The
- 5 system 30 further includes a content ID embedding unit 34,
- 6 for embedding an obtained content ID in digital content.
- 7 The digital content in which the content ID is embedded is
- 8 then stored in a content DB 31. In this manner, the agent
- 9 server system 10 adds a registration number to the content
- 10 for which the content registration requesting unit 32 has
- 11 requested the registration, and the same registration
- 12 number is also added to an electronic watermark, for
- 13 example, or a content header. The addition of the content
- 14 ID is performed by the content ID embedding unit 34 of the
- 15 content provider system 30 that received the tool from the
- 16 agent server system 10. However, this embedding operation
- may be performed by the agent server system 10.
- 18 The content provider system 30 includes: a downloading
- 19 request receiving unit 35, for receiving a digital content
- 20 download request from the user terminal 50; and an
- 21 ID-added content disclosing unit 36, for providing for the
- user terminal 50, upon the reception of the request by the
- 23 downloading request receiving unit 35, content accompanied
- 24 by an ID. In this manner, the digital content is stored
- 25 at the site of the content provider, while a download
- 26 request from a common user is waited for.
- 27 Fig. 5 is a block diagram showing the configuration of the
- user terminal 50. The user terminal 50 includes, to

- fulfill content search functions, a content search
- 2 requesting unit 51, for outputting a request to the agent
- 3 server system 10 for a search for preferred content, and a
- 4 search results reception unit 52, for receiving the search
- 5 results, as well as, for content downloading functions, a
- 6 content download requesting unit 53, for outputting a
- 7 content downloading request to the content provider system
- 8 30, and a content reception unit 54, for receiving content
- 9 supplied by the content provider system 30 upon its
- 10 reception of the downloading request. When downloading
- 11 targeted content, the user terminal 50 downloads it
- 12 directly from the content provider system 30, the site
- 13 that owns the pertinent content. A user can select an
- 14 arbitrary file form; however, if the file formatting is
- 15 changed following the embedding of the content ID, it may
- 16 be that the content ID embedded at the header will be
- 17 erased and only a content ID that serves as an electronic
- 18 watermark will be maintained.
- 19 The user terminal 50 often further includes: a
- 20 reproduction device (reproduction software) 55 having a
- 21 content ID detection function; an ID detection compatible
- 22 player downloading unit 56, for downloading the
- 23 reproduction software 55; a content ID notification unit
- 24 57; a user ID notification unit 58; and an advertisement
- 25 and/or other content data reception unit 59, for receiving
- 26 advertisement and/or other content data from the
- 27 advertiser system 70. The content, which is downloaded by
- 28 the content reception unit 54, is reproduced by the
- 29 reproduction software 55. In this embodiment, a digital

- 1 content can be read by using a conventional player, but
- 2 the content ID can not be identified. This is because
- 3 while taking into account the convenience of users, no
- 4 limitation is placed on the file formats. To encourage
- 5 the downloading of the reproduction software 55, it is
- 6 preferable that valid effects/incentives be provided as
- 7 the result of downloading a new player. For example, if a
- 8 priority right for obtaining a ticket to a concert given
- 9 by a famous musician is provided users who download the
- 10 reproduction software 55, this is an effective method for
- 11 promoting the spread and the use of the software. The
- 12 content ID, which is detected by the reproduction software
- 13 55 that is thus provided for the user terminal 50, is
- 14 transmitted to the agent server system 10 by the content
- 15 ID notification unit 57, while the user ID notification
- unit 58 employs a cookie, for example, to transmit a user
- 17 ID to the agent server system 10. Thereafter, based on
- 18 the information transmitted by the content ID notification
- unit 57 and the user ID notification unit 58, the
- 20 advertisement and/or other content data reception unit 59
- 21 obtains advertisement and/or other content data from the
- advertiser system 70.
- 23 Fig. 6 is an example of a flowchart showing the processing
- 24 performed by the reproduction device (reproduction
- 25 software) 55 that includes the content ID detection
- 26 function. First, the reproduction software 55 reproduces
- 27 content that is received and downloaded by the content
- 28 reception unit 54 (step 101). Then, a check is performed
- 29 to determine whether the user terminal 50 is connected via

- a network (step 102). If the user terminal 50 is not connected, the normal reproduction of the content is performed (step 103). Whereas if the user terminal 50 is
- 4 connected, the content ID embedded in the content is
- 5 detected (step 104) and the detected content ID is
- 6 uploaded to the agent server system 10 connected via the
- 7 network. A specific method is provided for the use of an
- 8 agent (Aglet) to transit the content ID and the address of
- 9 a user. The agent server system 10 refers to the internal
- 10 advertisement and/or other content ledger DB 12, and
- 11 transmits a trigger to the site of the advertiser system
- 12 70, and if the user terminal 50 is not connected via the
- 13 network, prevention of the reproduction of the content
- 14 does not occur. Thereafter, an advertisement and/or other
- 15 content obtained by the advertisement and/or other content
- 16 data reception unit 59 is received, and the advertisement
- 17 and/or other content, received in a pop-up window, for
- 18 example, is reproduced, together with the content (step
- 19 105). These data are displayed on the screen of a
- 20 portable telephone or a PDA.
- 21 In this embodiment, as is described above, an
- 22 advertisement and/or other content is tied to content, and
- 23 a discount coupon, for example, can be distributed for a
- 24 CD that is sold at a shop and is related to the content.
- 25 When such an attractive "premium" is attached as an
- 26 advertisement and/or other content, the inclination of a
- 27 user to delete the link can be removed. Further, the
- 28 system can be so designed that only information available
- 29 via the link is set, or that information that is not

17

- 1 initially distributed is added later. These are unique
- 2 points provided by this system.
- 3 Fig. 7 is an example of a block diagram showing the
- 4 configuration of the advertiser system 70. The system 70
- 5 includes: an advertisement and/or other content
- 6 preparation unit 72, for preparing an advertisement and/or
- 7 other content to be displayed on the screen of the user
- 8 terminal 50; a registration requesting unit 73, for
- 9 requesting from the agent server system 10 the
- 10 advertisement and/or other content request or the
- 11 registration of a site that distributes advertisements
- 12 and/or other contents; and a registration notification
- 13 reception unit 74, for receiving information indicating
- 14 that a site is registered with the agent server system 10.
- 15 An advertisement and/or other content prepared by the
- 16 advertisement and/or other content preparation unit 72 is
  - stored in the advertisement and/or other content DB 71,
- 18 together with information received by the registration
- 19 notification reception unit 74. The advertiser system 70
- 20 further includes, to fulfill the advertisement and/or
- 21 other content distribution functions, an addressee user ID
- 22 notification reception unit 75 for receiving, from the
- 23 agent server system 10, an advertisement and/or other
- 24 content distribution address, such as an ID address or a
- 25 user ID; and an advertisement and/or other content data
- 26 distribution unit 76 for the distribution to the user
- 27 terminal 50, based on the received advertisement and/or
- 28 other content distribution address, of an advertisement
- 29 and/or other content stored in the advertisement and/or

- 1 other content DB 71. Although not shown, in accordance
- with the advertisement and/or other content fee payment
- 3 process, a bill including a charge calculated using the
- 4 reproduction count is received from the agent server
- 5 system 10, and payment of the advertisement and/or other
- 6 content fee is performed based on the bill.
- 7 The advertisement and/or other content prepared by the
- 8 advertisement and/or other content preparation unit 72 is
- 9 displayed, as is a panel type banner, on the PC screen of
- 10 the user terminal 50 of a user or on the screen of a net
- 11 connected terminal, such as a portable telephone or a PDA.
- 12 A pop-up screen may be employed for a display, and a Java
- 13 applet form may be employed as a display form. The
- 14 advertisement and/or other content is transmitted by
- 15 "Push" to a designated IP address that is received by the
- 16 addressee user ID notification reception unit 75; however,
- 17 the guidelines and specifications for the preparation of
- 18 an advertisement and/or other content can be designated
- 19 and disclosed by a predetermined service provider (not
- 20 shown). Further, the provision of preparation tools and
- 21 preparation agent services can use as the basis for the
- 22 establishment of a business.
- 23 As is described above, according to the model in this
- 24 embodiment, an address is received from a user who
- 25 distributes an advertisement and/or other content, and the
- 26 advertisement and/or other content can be updated or
- 27 changed at an arbitrary time. The advertisement and/or
- other content can also be updated when an error is found

- in the advertisement and/or other content or when the
- 2 advertisement and/or other content are changed, and
- 3 further information requiring an immediate response, such
- 4 as the "remaining number of tickets", can be added. Thus,
- 5 the problem presented by the possibility that an
- 6 advertisement and/or other content prepared and
- 7 distributed several years previously will continue to be
- 8 reproduced indefinitely can be resolved. In addition, it
- 9 is possible to distribute different information to each
- 10 user based on the registered information as needed. For
- 11 example, information concerning the age and preferences of
- 12 a user can be acquired from information supplied by the
- 13 user or can be obtained from a history of the content that
- 14 the user has frequently accessed, and an advertisement
- 15 and/or other content that will probably benefit the user
- 16 can be identified and distributed. Also, advertisement
- 17 and/or other content information that a user does not
- 18 desire to receive can be obtained in advance, and can be
- 19 used to selectively distribute acceptable announcements to
- 20 the user. In addition, a content provider can use this
- 21 system for advertising his music, recording or concert.
- 22 In this case, it would be appropriate that the lowest
- 23 advertiser or commission fee be paid the agent server
- 24 system 10.
- 25 In this example embodiment, when the system for
- 26 correlating multimedia content with metadata that relative
- 27 to the content is externally located, added value can be
- 28 provided for the content. In this instance, added value
- 29 may be, for example, the performance of a search using an

- index, a clipping of a specific scene or a link to
- 2 relevant information. An advertisement and/or other
- 3 content may also be positioned as a type of relevant
- 4 information. As a result, a user of the content can pay
- 5 an attention to the advertisement and/or other content
- 6 information naturally, and the uncomfortable feeling often
- 7 engendered by an advertisement and/or other content can be
- 8 reduced. That is, so long as a service using metadata is
- 9 satisfactory, the interest in metadata occurs
- 10 automatically, so that there is a high probability that an
- 11 advertisement and/or other content will draw the attention
- 12 of a user.
- 13 In this embodiment, the property of explosively spreading
- 14 media can be aggressively used for a business, such as an
- 15 advertising business. That is, the size of the potential
- 16 audience for advertisements and/or other contents can be
- 17 actively increased by redistributing such as downloading
- or coping, while users at end terminals can legally enjoy
- 19 free content, business owners can avail themselves of
- 20 opportunities to expand sales through advertisements
- 21 and/or other contents, and copyright holders can collect
- 22 fees for the distribution of content. Therefore, business
- 23 and culture can be mutually and safely developed, while
- 24 the current random and illegal copying and the current
- 25 electronic distribution system, which is not easy to use
- 26 because of the due to the use of excessively ponderous
- 27 protection mechanisms, can be eliminated. Moreover, the
- 28 system of this embodiment, in addition to file
- 29 downloading, can also be used for moving picture content,

- 1 and for streaming distribution.
- 2 Whether or not the system of this embodiment is widely
- 3 employed depends in great part on how widespread is the
- 4 mounting of the reproduction player reproduction software
- 5 55. As is described above, the provision of incentives is
- 6 one method by which new players can be encourage to
- 7 download the new player. Another is a method, for
- 8 example, whereby content having low image or low tone
- 9 quality or that is incomplete is provided first, and when
- 10 a search for a content ID is initiated by the reproduction
- 11 software 55, the advertiser system 70 distributes content
- 12 having high image or tone quality to which advertisement
- 13 and/or other content information has been added. As an
- 14 additional method, sample content may be provided first,
- 15 and when a search for a content ID is requested by the
- 16 reproduction software 55, complete, corresponding content
- may be provided by the advertiser system 70. Thereafter,
- 18 for example, when a difference between the first content
- 19 and content that can next be provided is transmitted with
- 20 an advertisement and/or other content, the downloading of
- 21 the reproduction software 55 will be performed frequently
- 22 and widespread use of it will ensue.
- 23 In this embodiment, as is described above, an
- 24 advertisement and/or other content to be introduced using
- 25 the same content, or the effective period of time an
- 26 advertisement and/or other content is to be used can be
- 27 flexibly set. Further, the contribution provided by
- 28 content when used as an advertisement and/or other content

- 1 medium can be evaluated by conducting an inquiry. And
- 2 thus, a specific basis (the actual profit accrued) can be
- 3 established for the calculation of a charge for the
- 4 services rendered an advertiser, and compensation
- 5 consonant with the contribution made by the content can be
- 6 distributed to the content provider. Furthermore, since a
- 7 content ID is embedded as an electronic watermark in the
- 8 content that is used, the same service can be provided by
- 9 content whose format has been changed, without having to
- 10 depend on a specific format. In addition, since the
- 11 preferences of users at advertisement and/or other content
- 12 distribution addresses can, to a degree, be deduced,
- 13 advertisements and/or other contents that are judged
- 14 appropriate for such users can be distributed, and the
- 15 effects produced by the advertisements and/or other
- 16 contents improved.
- 17 In this example embodiment, the data to be distributed has
- 18 been that which use advertisements. However, not only
- 19 general advertisement and/or other content information,
- 20 but also additional information corresponding to a content
- 21 ID can be provided for a user terminal 50. For example, a
- 22 portion of content may be intentionally separated, and
- 23 based on the content ID, the remaining content, which is
- 24 additional information provided by a predetermined site,
- and the content is completed by the user terminal 50.
- 26 Further, as additional information, content having a high
- 27 image or tone quality may be distributed. That is,
- 28 additional information that is provided to increase
- 29 resolution or tone quality may be provided by a site based

- on the content ID that serves as an identifier.
- 2 Thus, as is described above, according to the present
- 3 invention, the property of explosively spreading media can
- 4 be used for a business, such as an advertising business.
- 5 The present invention can be realized in hardware, software,
- 6 or a combination of hardware and software. A visualization
- 7 tool according to the present invention can be realized in a
- 8 centralized fashion in one computer system, or in a
- 9 distributed fashion where different elements are spread
- 10 across several interconnected computer systems. Any kind of
- 11 computer system or other apparatus adapted for carrying
- 12 out the methods and/or functions described herein is
- 13 suitable. A typical combination of hardware and software
- 14 could be a general purpose computer system with a computer
- 15 program that, when being loaded and executed, controls the
- 16 computer system such that it carries out the methods
- 17 described herein. The present invention can also be
- 18 embedded in a computer program product, which comprises all
- 19 the features enabling the implementation of the functions
- 20 and/or methods described herein, and which when loaded in
- 21 a computer system is able to carry out these methods
- 22 and/or functions.
- 23 Computer program means or computer program in the present
- 24 context include any expression, in any language, code or
- 25 notation, of a set of instructions intended to cause a
- 26 system having an information processing capability to
- 27 perform a particular function either directly or after

- 1 conversion to another language, code or notation, and/or
- 2 after reproduction in a different material form.
- 3 Thus the invention includes an article of manufacture which
- 4 comprises a computer usable medium having computer readable
- 5 program code means embodied therein for causing any
- 6 function described above. The computer readable program
- 7 code means in the article of manufacture comprises computer
- 8 readable program code means for causing a computer to
- 9 effect the steps of a method of this invention. Similarly,
- 10 the present invention may be implemented as a computer
- 11 program product comprising a computer usable medium having
- 12 computer readable program code means embodied therein for
- 13 causing a a function described above. The computer
- 14 readable program code means in the computer program product
- 15 comprising computer readable program code means for causing
- 16 a computer to effect one or more functions of this
- 17 invention. Furthermore, the present invention may be
- implemented as a program storage device readable by
- 19 machine, tangibly embodying a program of instructions
- 20 executable by the machine to perform method steps for
- 21 causing one or more functions of this invention.
- 22 It is noted that the foregoing has outlined some of the
- 23 more pertinent objects and embodiments of the present
- 24 invention. This invention may be used for many
- 25 applications. Thus, although the description is made for
- 26 particular arrangements and methods, the intent and concept
- of the invention is suitable and applicable to other
- 28 arrangements and applications. It will be clear to those

- 1 skilled in the art that modifications to the disclosed
- 2 embodiments can be effected without departing from the
- 3 spirit and scope of the invention. The described
- 4 embodiments ought to be construed to be merely illustrative
- 5 of some of the more prominent features and applications of
- 6 the invention. Other beneficial results can be realized by
- 7 applying the disclosed invention in a different manner or
- 8 modifying the invention in ways known to those familiar with
- 9 the art.